

# South Carolina Arts Commission

Creating a thriving arts environment that benefits all South Carolinians

## South Carolina's Creative Cluster: A Catalyst for Economic Development

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April 2011



## About this report

Researchers at the Darla Moore School of Business at the University of South Carolina analyzed 2008 data from the U.S. Census Bureau and the U.S. Department of Commerce, Bureau of Economic Analysis, regarding the creative economy associated with the arts, design, crafts and related activities in South Carolina. The results of the analysis reveal that creative enterprise in the state engenders a core impact of \$9.2 billion and a full impact of \$13.3 billion. (Research conducted by Veronica Watson, research analyst.)

## Dr. Douglas P. Woodward

Dr. Douglas P. Woodward is the director of the Division of Research and professor of economics at the Darla Moore School of Business at the University of South Carolina. He earned his Ph.D. in economics at the University of Texas in 1986. Dr. Woodward's primary research interests are in the areas of regional economic development, entrepreneurial economics and international economics. He has published numerous academic articles in economics and regional science journals.

Dr. Woodward has conducted sponsored economic research in the United States, China, Morocco, South Africa, Kenya and elsewhere. Over his career, Dr. Woodward has received many grants and awards. He has testified before local, state and national government committees and has presented his research at many conferences around the world, including the prestigious World Economic Forum in Davos, Switzerland. Dr. Woodward has been quoted frequently in the national press and has often appeared on television and radio programs discussing economic development and related topics.

## South Carolina Arts Commission

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### Mission

With a commitment to excellence across the spectrum of our state's cultures and forms of expression, the South Carolina Arts Commission pursues its public charge to develop a thriving arts environment, which is essential to quality of life, education and economic vitality for all South Carolinians.

### Goals

#### Arts Education

Establish the arts as an integral part of South Carolina's educational systems and the lifelong learning process of our citizens.

#### Artist Development

Encourage, nurture and support the artistic growth and personal and economic well-being of South Carolina artists.

#### Community Development

Stimulate the development of South Carolina's culturally diverse arts resources and organizations and promote creative partnerships to improve the quality of our lives, preserve our cultural heritage and enhance our economic growth.



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# South Carolina's Creative Cluster: A Catalyst for Economic Development

## Introduction

Across the United States, there is mounting evidence that the arts and culture significantly boost regional and local economic development. The best-known argument was put forth in **The Rise of the Creative Class**, by Professor Richard Florida. This seminal work by Florida (2002) transformed how states and localities viewed the drivers of regional economic growth, showing that it is not the location and clustering of industries alone that matter, but also the location and clustering of talented and creative workers. In Florida's theory, the creative class is an eclectic mix of intellectual (rather than manual) labor, which ranges from artists and designers to engineers and scientists. The original work and subsequent research showed that communities with thriving arts and culture attract and retain highly productive knowledge-economy businesses. Classic cases in the southern United States are Austin, Texas, and the Research Triangle area of North Carolina.

Broadly conceived, the creative class accounts for a large share of employment (Florida, 2002). While manufacturing and agriculture are still fundamental bedrocks of the U.S. economy, fewer people work in those sectors every year. Instead, an increasing number of job opportunities are found in the creative and knowledge-based sectors.

Recently, there has been more focus in economic development on particular types of creative activity. Some studies examine concentrations of technical and scientific firms and occupations—that is, high technology industries and workers. In addition, there is increasing interest in business activities related to creative pursuits at the other end of the inventive and innovative spectrum: for example, musicians, artists, designers and architects.

**This report presents results from a study of the creative economy associated with the arts, design, crafts and related activities in South Carolina.** As this report will show, these creative individuals and enterprises exert a strong impact on the state's economic base. Like other drivers of the regional economy, **this creative activity revolves around a cluster, or a set of interrelated industries, that thrive in tandem.** Along with manufacturing and agriculture, the creative cluster is a catalyst for state and local economic development.

The report presents results from an analysis of the South Carolina creative cluster based on 2008 data. **For the first time, this report provides a comprehensive summary of the creative economic footprint in South Carolina.** The main objective is to evaluate the size and impact of economic activities tied to the creative industries and occupations. It should be stressed at the outset that there are many intangible benefits to creative activities that go beyond the economic effects quantified in this report. The arts and culture are essential to a state's quality of life and regional identity. Yet creative activities are also engines of economic development. The arts and culture boost tourism. They help the state draw and preserve skilled labor and cutting-edge companies. The arts enhance the lives of all citizens.

## Assessing the Regional Economic Value of Creative Enterprise

No doubt creative activities can be more difficult to measure than other sectors because they cover such a diverse range of businesses and individuals. How, then, can the value of arts, design and related activities be assessed? **Essentially, the value of a creative cluster can be evaluated in a manner similar to traditional industries: notably, through employment and income.**

Measuring the extent of the creative enterprise ecosystem of South Carolina entails pinpointing the industries where workers have an associated artistic activity. To be sure, some workers in the creative cluster are not performing tasks that would be directly considered artistic or creative; for example, administrative occupations. Yet these workers are supported by the creative activity and comprise part of the overall cluster.

The analysis underlying this report was based on pathbreaking work conducted in North Carolina by Regional Technology Strategies (2007). The North Carolina study defined creative industries according to industries that were involved in artistic and design creation, production and dissemination. The study also included industries that provided inputs and support to artistic and design activities.

The North Carolina study identified both a core group of industries involved in creative work, along with a broader group of related industries (see Appendix). The core encompasses individual artists along with businesses such as architecture and interior design. The creative cluster thus includes a wide range of small and large enterprises. Beyond the core, the full cluster consists of manufacturing and retail sectors that relate to creative businesses, such as publishing.

To determine the extent of the impact of a diverse range of activities, the study in North Carolina estimated the number of jobs in the industries tied to creative activity and then assessed the economic impact through the multiplier effect.

**The central notion of multiplier analysis is that economic effects of a direct activity can be far-reaching when one takes the linkages between different sectors of the state's economy into account.** That is, the economic activities related to the creative cluster spread economic benefits by means of a multiplier effect. Music and arts organizations, for example, hire workers and spend money in the local economy, and this leads to further income and spending. Thus, in the multiplier process, economic activities directly tied to the state's resource base are amplified as their spending and hiring in the local economy creates multiple layers of income for other sectors. The economic multiplier is an accepted and widely practiced technique used to assess the total impact of regional business activities.

The basis for calculating economic impacts through the multiplier effect is an inter-industry or input-output model. Impact analysis entails calculating the extent to which direct activities stimulate further economic effects, spreading employment and income, so accounting for linkages among industries is essential. Based on **Implan**, the widely used input-output modeling software, this study was able to quantify the full effects of the creative cluster of business activities. The total economic impact is a sum of direct, indirect, and induced effects of creative activities, as described below.

<p><b>Direct Impact</b> The effects of creative enterprise expenditures (mostly local purchases and wages) that are injected into the state's economy.</p>	<p><b>Indirect Impact</b> The ripple effects of spending on in-state suppliers.</p>	<p><b>Induced Impact</b> The statewide ripple effects of expenditures from wages and salaries.</p>
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The direct, indirect, induced and total impacts can be measured in four ways: employment, total output (or economic impact), value added (or gross state product), and labor income. In simple terms, these metrics are defined as:

<p><b>Employment</b> - the total number of jobs associated with the measured economic activities tied to creative activities.</p>
<p><b>Total Impact</b> (or Output) - the contribution to overall economic activity. It measures the annual value of goods and services associated with creative activity-related business activities.</p>
<p><b>Value Added</b> - the net contribution to the state's economy, similar to gross domestic product for the state.</p>
<p><b>Labor Income</b> (or Earnings) - the contribution to wages and salaries.</p>

## Results: The Creative Cluster in South Carolina

Tables 1 and 2 present the results of the economic impact analysis for South Carolina for 2008.

To appreciate the full reach of the state's creative activities, employment is the most easily understood economic metric. As seen in Table 1, the core creative cluster employment tally is 78,682. Table 2 gives the full impact of creative economic activities in South Carolina: **107,614 jobs**. This represents **4.4 percent of the state's employment base**.

Next consider **total economic impact** of this important sector of the state's economy. As described earlier, this is the contribution to overall economic activity. It measures the annual value of goods and services associated with creative cluster-related employment. The results of the analysis reveal that **creative enterprise in the state engenders a core impact of \$9.2 billion and a full impact of \$13.3 billion**.

Tables 1 and 2 also display impacts for labor income and value added (gross state product) in South Carolina. In general, the creative activities defined in this report comprise approximately 4 percent of the state's economy.

Finally, tax revenue impacts were calculated for the state of South Carolina. Based on the additional annual value added of \$6.3 billion for South Carolina, state tax revenue would increase by \$571.5 million. This estimate results from the ratio of general fund revenue (from the U.S. Census Bureau) to South Carolina's nominal GDP (from the U.S. Department of Commerce, Bureau of Economic Analysis).

**Table 1: Core Creative Industry Summary Impacts**

	Employment	Labor Income (\$)	Total Value Added (\$)	Output (\$)
<b>Direct Effect</b>	45,468	1,625,653,265.75	2,253,464,950.75	5,385,637,287.00
<b>Indirect Effect</b>	17,445	674,915,773.01	1,121,437,080.27	2,096,357,958.21
<b>Induced Effect</b>	15,770	538,292,459.66	1,018,808,571.35	1,749,003,819.79
<b>Total Effect</b>	78,682	2,838,861,498.42	4,393,710,602.38	9,230,999,064.99
<b>% of SC Total</b>	3.22%	3.04%	2.76%	2.85%



**Table 2: Full Creative Industry Summary Impacts**

	Employment	Labor Income (\$)	Total Value Added (\$)	Output (\$)
<b>Direct Effect</b>	60,697	2,304,222,094.75	3,231,675,985.13	7,831,367,750.50
<b>Indirect Effect</b>	24,542	970,667,392.74	1,602,466,130.97	3,000,343,519.27
<b>Induced Effect</b>	22,375	764,087,087.32	1,445,890,504.56	2,482,207,463.98
<b>Total Effect</b>	107,614	4,038,976,574.81	6,280,032,620.66	13,313,918,733.76
<b>% of SC Total</b>	4.40%	4.33%	3.95%	4.13%

## Conclusion

No one would dispute that arts and culture play a central role in supporting South Carolina's unique quality of life. Yet to date the creative cluster's economic contributions have been less appreciated or understood. Following seminal work done in North Carolina, this report reveals the extent of creative activity in the South Carolina economy during 2008.

At a time when job opportunities for South Carolinians remain a critical challenge, the creative cluster can be seen as crucial to the overall economy. South Carolina's employment base needs the jobs in creative industries to foment economic development. South Carolina has about 108,000 jobs associated with the creative cluster, according to 2008 estimates. The economic output generated by this sector has been estimated to be more than \$13 billion. The creative cluster contributes \$571.5 million to the South Carolina state revenue base.

In sum, this report demonstrates that South Carolina is fortunate to possess a strong, vibrant creative enterprise sector. More than 100,000 jobs are associated with the individuals and business activities described in report. They generate hundreds of millions of dollars in tax revenue for the state. Clearly, these are substantial economic benefits. With continuing public support, the creative cluster has potential to expand significantly in the decades ahead.

## Appendix: Creative Industries

	Total Employment	Name	Sector	Core/Full
<b>NAICS</b>				
111422	0	Floriculture Production	Inputs	Core
323110	1634	Commercial Lithographic Printing	Production	Full
323111	0	Commercial Gravure Printing	Production	Full
323112	802	Commercial Flexographic Printing	Production	Full
323113	533	Commercial Screen Printing	Production	Full
323115	117	Digital Graphics and Pre-Press Design	Creation	Core
323117	1	Books Printing	Production	Full
323122	0	Pre-press Design Services	Creation	Core
325992	1103	Photographic Film	Inputs	Full
327112	175	Vitreous China	Production	Full
327212	1721	Other Pressed and Blown Glass and Glassware Manufacturing	Production	Full
332323	267	Ornamental and Architectural Metal Work Manufacturing	Production	Core
337212	134	Custom Architectural Woodwork and Millwork Manufacturing	Production	Full
339911	18	Jewelry (except Costume) Manufacturing	Production	Core
339913	0	Jewelers' Material and Lapidary Work Manufacturing	Production	Core
339914	23	Costume Jewelry and Novelty Manufacturing	Production	Full
339992	0	Musical Instrument Manufacturing	Inputs	Core
423940	555	Jewelry, Watch, Precious Stone & Precious Metal Wholesalers	Inputs	Full
424920	571	Book and Periodical Wholesalers	Dissemination	Full
443130	115	Camera and Photographic Supplies Stores	Inputs	Full
448310	2695	Jewelry Stores	Dissemination	Core
451130	904	Sewing, Needlework, and Piece Goods Stores	Inputs	Full
451140	553	Musical Instrument and Supplies Stores	Inputs	Core
451211	1834	Book Stores	Dissemination	Full



## Appendix: Creative Industries

	Total Employment	Name	Sector	Core/Full
<b>NAICS</b>				
451220	218	Prerecorded Tape	Dissemination	Full
453110	1805	Florists	Production	Full
453310	402	Antique Shops	Dissemination	Full
453920	759	Art Dealers	Dissemination	Core
511110	3457	Newspaper Publishers	Production	Core
511120	543	Periodical Publishers	Production	Core
511130	459	Book Publishers	Production	Core
511199	20	Art and calendar print publishers	Production	Full
511210	1356	Software Publishers	Production	Full
512110	1325	Motion Picture and Video Production	Production	Core
512120	22	Motion Picture and Video Distribution	Dissemination	Core
512131	0	Motion Picture and Video Exhibition	Dissemination	Core
512191	21	Teleproduction and Other Postproduction Services	Production	Full
512210	165	Record Production	Production	Core
512220	12	Integrated Record Production/Distribution	Production	Core
512230	24	Music Publishers	Production	Core
512240	8	Sound Recording Studios	Production	Core
512290	0	Other Sound Recording Industries	Production	Full
515111	829	Radio Networks	Dissemination	Core
515112	909	Radio Stations	Dissemination	Full
515120	1338	Television Broadcasting	Dissemination	Core
515210	26	Cable and Other Subscription Programming	Dissemination	Full
519110	38	News Syndicates	Production	Full
519120	3640	Libraries and Archives	Dissemination	Full
519130	173	Internet Publishing and Broadcasting	Production	Core
541310	2537	Architectural Services	Creation	Core
541320	1849	Landscape Architectural Services	Creation	Core

## Appendix: Creative Industries

	Total Employment	Name	Sector	Core/Full
<b>NAICS</b>				
541340	847	Drafting Services	Creation	Core
541410	3164	Interior Design Services	Creation	Core
541420	115	Industrial Design Services	Creation	Core
541430	466	Graphic Design Services	Creation	Core
541490	69	Other Specialized Design Services	Creation	Core
541810	1333	Advertising Agencies	Creation	Core
541850	772	Display Advertising	Creation	Full
541860	388	Direct Mail Advertising	Production	Full
541890	614	Other Services Related to Advertising	Production	Full
541921	2959	Photography Services, Portrait	Creation	Core
541922	52	Commercial Photography	Creation	Core
611110	2591	Elementary and Secondary Schools	Support	Full
611310	3180	Colleges and Universities	Support	Full
611610	535	Fine Arts Schools	Support	Core
711110	2348	Theater Companies and Dinner Theaters	Production	Core
711120	90	Dance Companies	Production	Core
711130	477	Musical Groups and Artists	Creation	Core
711190	81	Other Performing Arts Companies	Production	Core
711310	1075	Promoters of Performing Arts, Sports, and Similar Events with Facilities	Dissemination	Full
711320	129	Promoters of Performing Arts, Sports, and Similar Events without Facilities	Dissemination	Full
711410	464	Agents and Managers for Artists, Athletes, Entertainers, and Public Figures	Inputs	Full
711510	7089	Independent Artists, Writers, and Performers	Creation	Core
712110	1034	Museums	Support	Core
811420	911	Furniture Repair and Restoration	Production	Full
812921	220	Photofinishing Laboratories (except one-hour)	Inputs	Full

## Appendix: Creative Industries

	Total Employment	Name	Sector	Core/Full
<b>NAICS</b>				
812922	27	One-Hour Photofinishing	Inputs	Full
813211	19	Grantmaking Foundations	Support	Full
813219	29	Other Grantmaking and Giving Services	Support	Full
813319	77	Other Social Advocacy Organizations	Support	Full
813410	273	Cultural and Historical Clubs	Support	Full
813920	41	Professional Organizations	Support	Full
926110	1625	Arts and Cultural Program Administration	Support	Full

## References

NAICS is the North American Industry Classification System, the standard used to classify businesses in order to collect data related to the U.S. business economy.

Florida, Richard. 2002.

**The Rise of the Creative Class. And How It's Transforming Work, Leisure and Everyday Life.**  
New York: Basic Books.

Regional Technology Strategies, Inc., 2007.

**Clusters of Creativity: The Role of the Arts and Design in North Carolina's Economy.**  
Submitted to the North Carolina Arts Council, April.

## Photo credits: Front cover

### Creative industries examples

Left to right, top: The Columbia Museum of Art's outdoor spaces showcase art and architectural and landscape services; Huntboard handmade by custom furniture maker Michael McDunn of Greenville; PrintSouth Printing, Inc., of Columbia, an example of commercial printing.

Bottom: Artist and Governor's School for the Arts instructor Ben Gilliam of Greenville; Colleges and universities provide instruction in the creative industries; the USC Aiken Convocation Center presents and promotes performing arts in its facility.

This document is also available at [www.SouthCarolinaArts.com](http://www.SouthCarolinaArts.com) or by calling (803) 734-8696.

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1,000 copies of this publication were  
printed at a cost of \$1.82 per copy.